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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,587	09/27/2001	Sundar J. Rajan	54676US002	2684
32692	7590	09/07/2006	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY			CHEVALIER, ALICIA ANN	
PO BOX 33427			ART UNIT	
ST. PAUL, MN 55133-3427			PAPER NUMBER	

1772

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/937,587

Applicant(s)

RAJAN ET AL.

Examiner

Alicia Chevalier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 6/20/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 7-37 is/are pending in the application.
- 4a) Of the above claim(s) 20-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-19 and 37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### **RESPONSE TO AMENDMENT**

1. Claims 1-4 and 7-37 are pending in the application, claims 20-36 are withdrawn from consideration. Claims 5 and 6 have been cancelled.
2. Amendments to the claims, filed on June 20, 2006, have been entered in the above-identified application.

### ***REJECTIONS***

3. **The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.**

### ***Claim Rejections - 35 USC § 103***

4. Claims 1-4, 7-19 and 37 rejected under 35 U.S.C. 103(a) as being unpatentable over Orensteen et al. (U.S. Patent No. 5,508,105) in view of Lu (U.S. Patent No. 5,670,096).

Orensteen discloses a signage article comprising a retroreflective core sheeting material with a surface binder layer of polyvinyl butyral or synthetic polyester (substrate comprising a noncellulosic organic polymeric surface) [col. 11, lines 3-24], a cured multi-function layer (a radiation cured coating disposed on the noncellulosic polymeric surface) [col. 11, line 63 to col. 12, line 7], and indicia formed from resin based colorant/binder (a marking material disposed on the radiation cured coating). See column 14, lines 31-48 and figure 3. The cured multi-function layer comprises an aliphatic acrylated urethane (e-beam/uv-curable composition) [col. 10, lines 14-49]. Furthermore, Orensteen does not disclose the need or use of a protective coating over

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the marking material [figure 3]. The signage article has use in validation stickers [col. 1, lines 51-57].

Orensteen fails to disclose tat the signage article is a radiation cured coating.

Lu discloses a signage article (*retroreflective article, title*) comprising a substrate (*array microlenses, col. 5, line 25 and figure 2*) comprising a noncellulosic organic polymer surface (*col. 9, lines 20-34*), a radiation cured coating (*spacing layer, col. 5, line 25 and figure 2*) cross linked by exposure radiation selected from the group consisting of ultraviolet radiation, visible radiation, electron beam radiation, and combinations thereof disposed on the noncellulosic organic polymeric surface (*col. 7, lines 53-66 and claim 2*) and a marking material (*ink, col. 5, lines 39-40*) disposed on the radiation cured coating (*figure 2*). The radiation cured coating is deemed to be an exposed surface, since it is exposed to the marking (*figure 2*).

In the instant case, Lu does not explicitly teach the properties wherein the marking material is not substantially removed from the signage article upon wiping the marking material with gasoline for five cycles, ten cycles, or twenty cycles, upon abrading the marking material for 1000 scrub cycles, or upon applying a pressure sensitive adhesive-coated tape to the marking material under thumb pressure and removing it. Also, Lu does not explicitly teach the properties wherein the radiation cured coating is not substantially removed from the signage article upon wiping the marking material with gasoline for five cycles, upon abrading the marking material for 1000 scrub cycles, or upon applying a pressure sensitive adhesive-coated tape to the marking material under thumb pressure and removing it.

However, it has been held that where claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially

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identical processes, a *prima facie* case of either anticipation has been established and the burden of proof is shifted to applicant to show that prior art products do not necessarily or inherently possess characteristics of claimed products where the rejection is based on inherency under 35 USC 102. Therefore, the *prime facie* case can be rebutted by *evidence* showing that the prior art products do not necessarily possess the characteristics of the claimed product. MPEP 2112.01.

Therefore, in addition to the above disclosed limitations, the presently claimed properties would have inherently been present because Lu discloses the same materials used for the radiation cured coating (*i.e. acrylates, col. 9, lines 11-19*) and the marking material (*ink, col. 5, lines 39-40*). MPEP 2112.01

The substrate comprises a noncellulosic organic polymeric surface comprising a retroreflective sheeting (*col. 7, lines 41-66*).

The retroreflective sheeting is deemed to be part of a validation sticker, since the retroreflective sheet, i.e. base sheet, is adhesively adhered to the surface of a document (*col. 5, lines 42-44*).

The marking material may comprise a second ink formulations comprising a colorant and a binder and the binder comprises a polymer selected from the group of a polyester, a vinyl, a polyolefin, a polyvinyl acetal, an alkyl or aryl substituted acrylate or methacrylate, a copolymer of ethylene or propylene with acrylic acid, methacrylic acid, or vinyl acetate, and combinations thereof (*col. 13, lines 1-6*).

The uv-curable composition comprises an acrylate (*col. 9, lines 11-19*).

The limitation "radiation cured coating is pattern coated" is a method limitation and does not determine the patentability of the product, unless the process produces unexpected results.

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The method of forming the product is not germane to the issue of patentability of the product itself, unless Applicant presents evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. MPEP 2113. Furthermore, there does not appear to be a difference between the prior art structure and the structure resulting from the claimed method because Lu discloses a radiation cured coating on a substrate.

The signage articles does not include a protective coating over the material (*figure 2*).

The signage article is a product authentication article (*col. 2, lines 40-41*).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use Lu's uv-curable composition as the composition of the surface layer in Orenstten in order to improve the retroreflective luster.

#### ***ANSWERS TO APPLICANT'S ARGUMENTS***

5. Applicant's arguments in the response filed June 20, 2006 regarding the previous rejection of record have been carefully considered but are deemed unpersuasive.

Applicant argues that Oresteen teaches away from using a crosslinker as they point out col. 10, lines 43-49 of Oresteen. While the examiner agrees that the alternative composition for the multi-function layer (col. 10, line 14) does teach away from using a crosslinker, the first embodiment of the multifunction layer does disclose the use of "one or more crosslinkers" (col. 9, line 12).

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (571) 272-1490. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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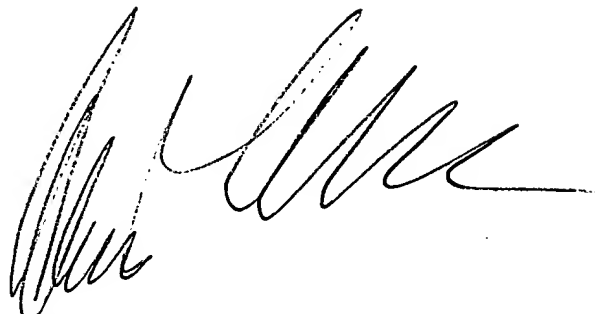
system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ac

9/3/06

A handwritten signature in black ink, appearing to be 'AC', with a horizontal line extending to the right.

**A. CHEVALIER**  
**PRIMARY EXAMINER**

A large, stylized handwritten signature in black ink, consisting of several loops and a long horizontal stroke at the end.

**AUCIA CHEVALIER**  
**PRIMARY EXAMINER**